

REMARKS

Applicant respectfully requests reconsideration. Claims 1-44 were previously pending in this application. Claims 4, 29 and 30 have been amended. No new claims have been added. No claims have been cancelled. As a result, claims 1-44 are pending for examination.

Allowable Subject Matter

Claims 7, 9-11, 18 and 22 are indicated to contain allowable subject matter. At this time, Applicant defers a rewriting of these claims to independent form, in light of this request for reconsideration.

Objections to the Drawings

The Examiner objected to the drawings as not showing an additional MOS device in the path between the first MOS device and the input to the comparator circuitry, per claim 22. In response, Fig. 4A is added, with an antecedent description thereof. Element 407 is recited, per a corresponding specification amendment, as a serial device that may be a MOS device.

Accordingly, withdrawal of this objection is respectfully requested.

Claim Objections

Objections were made to claims 4, 29 and 30. In response, these claims have been amended. In claim 4, "additional" has been changed to "additionally." In claims 29 and 30 antecedent bases for "the comparator" is provided by correcting the dependency.

Rejections Under 35 U.S.C. §102

The Examiner rejected claims 1, 12-14, 26 and 31-33 under 35 U.S.C. § 102 as anticipated by U.S. Patent No. 6,329,563 (Lee et al, or Lee). Reconsideration is requested as the Examiner apparently has misread Lee.

Lee relates to the field of memory provision. It is specifically directed toward providing a sharing of an external pin by two memory chips. The two memory chips are provided for redundancy. This sharing arrangement has specific problems, specifically related to the capacitance effected by this sharing and the resultant loss in transmission speed (see column 1, lines 44-55). Lee addresses this problem by providing, as stated in its abstract:

A semiconductor device having an input circuit well-suited for use in a stacked-chip configuration, results in a reduction in input capacitance, and an overall improvement in transmission speed. The semiconductor device includes at least two bonding pads which receive external electrical input signals from a shared common external pin, and at least two internal circuits, each electrically coupled to a corresponding bonding pad by a signal transmission line.

The disclosure is specific and unambiguous in that it refers to a sharing of an external pin by two bonding pads (emphasis added). The Examiner construes this non-ambiguous sharing of an external pin by two bonding pads as equating to a single pad cell being coupled to an external pin. Such a construction has no basis in fact. The claimed subject matter of the present application specifies that a plurality of signal paths are provided on the same pad cell (for example, the first signal path and second signal path of claim 1) and the operation of the specific signal path is effected by application of an appropriate signal to the external pin. Thus, the invention provides for multifunction use of the same pad-which one might call the opposite of redundancy. The provision of two signal paths on the same pad cell is not the same as two signal paths on two different pad cells. One does not equal two. Any assertion to the contrary has no basis. An individual skilled in the art would readily appreciate these differences. Therefore, claims 1 and 26, the only independent claims covered by the rejection, distinguish on their face over Lee.

While these facts are sufficient to establish novelty over Lee, it is further noted that Lee provides a semiconductor device having two circuits, each provided on a respective pad cell and selectively coupling one of the two circuits to the external pin, the selection is effected by blowing out an appropriate fuse provided between each of the circuits and the external pin. Once a fuse is blown, the circuit is taken out of commission. Blowing a fuse reduces capacitance and

increases transmission speeds in the remainder of the circuit. This is fundamentally different from the teaching in the instant application, which is not concerned about redundancy in memory applications but, rather, is directed (at least in part) toward increasing the functionality of a specific pad cell by enabling that one pad cell to support multiple pins and selecting an appropriate circuit operation by application of an appropriate signal to the external pin. These objections are fundamentally distinct from each other, as are the methods of achieving them.

Accordingly, withdrawal of this rejection is respectfully requested.

Rejections Under 35 U.S.C. §103

The Examiner rejected claims 2-3 and 33-34 under 35 U.S.C. §103(a) as being unpatentable over Lee in view of Publication No. 2002/0033504 (Ohnakado).

Claims 2, 3 and 33 are all dependent claims. They are novel over Lee for at least the reasons given above with respect to their corresponding independent claims. Ohnakado does not suggest any modification to Lee that would overcome the patentable differences between the claimed subject matter and that disclosed in Lee, as discussed above. Consequently, even without considering issues of combinability of the references, it is manifestly apparent that the combination of Lee and Ohnakado does not and can not disclose or suggest the invention of these claims.

Claim 34 is an independent claim. However, like claims 1 and 26, it recites, among other limitations, an external connection, a pad cell interposed between that external connection and the internal circuitry, and the pad cell comprising a first signal path and a second signal path to the internal circuitry. Consequently, for the same reasons given above, neither Lee nor Ohnakado taken alone or in combination discloses or suggests the subject matter of claim 34.

Accordingly, the rejection should be withdrawn.

Serial No. 10/824,850
Confirmation No.: 6842

14

Art Unit: 2836

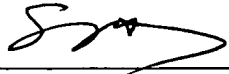
CONCLUSION

A Notice of Allowance is respectfully requested. The Examiner is requested to call the undersigned at the telephone number listed below if this communication does not place the case in condition for allowance.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Respectfully submitted,
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Serial No. 10/824,850
Confirmation No.: 6842

3

Art Unit: 2836

In the Drawings

Two Drawing "Replacement Sheets" are attached which include a clean version of new Fig. 4A. The attached sheets replace the original sheets including Figures 4 and 5.



APPENDIX

Replacement Sheet for Figure 4 and new Figure 4A
Replacement Sheet for Figure 5